

**WHAT IS CLAIMED IS:**

1. An arrangement for visual and quantitative three-dimensional examination of specimens, comprising:
  - a stereomicroscope that defines a first and a second observation beam path, and
  - a confocal scanning device is connected to the stereomicroscope thereby providing a scanning beam path wherein the confocal scanning device scans a specimen that is to be examined and acquires data for a three-dimensional visual depiction of the specimen.
2. The arrangement as defined in Claim 1, wherein the confocal scanning device is mounted on the stereomicroscope so that the scanning beam path can be coupled into the first or into the second observation beam path.
3. The arrangement as defined in Claim 2, wherein an optical coupling-in element which couples the scanning beam path into at least one of the observation beam paths is provided.
4. The arrangement as defined in Claim 1, wherein the stereomicroscope is equipped with a camera port at which the confocal scanning device couples the scanning beam path into the stereomicroscope.
5. The arrangement as defined in Claim 1, wherein the first and second illuminating beam path and the scanning beam path are together imaged by an objective of the stereomicroscope onto the specimen to be examined.
6. The arrangement as defined in Claim 1, wherein the confocal scanning device is connected to a computer that analyzes the image data acquired by the confocal scanning device and displays them on a display.

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7. A stereomicroscope for visual and quantitative three-dimensional examination of specimens, comprising:

- an objective
- a first and a second eyepiece, wherein the objective and the first and second eyepiece defines a first and a second observation beam path, and
- a confocal scanning device is connected to the stereomicroscope thereby providing a scanning beam path wherein the confocal scanning device scans a specimen that is to be examined and acquires data for a three-dimensional visual depiction of the specimen.

8. The stereomicroscope as defined in Claim 7, wherein scanning beam path provided by the confocal scanning device scans the specimen through the objective.

9. The stereomicroscope as defined in Claim 8, wherein an optical coupling-in element which couples the scanning beam path into at least one of the observation beam paths is provided.

10. The stereomicroscope as defined in Claim 8, wherein a camera port is provided at which the confocal scanning device is coupled to the stereomicroscope and a further lens is provided before the objective to guide the scanning beam path parallel to observation beam paths.

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